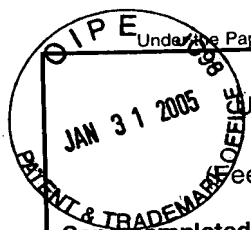


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**PETITION FEE**

Under 37 CFR 1.17(f), (g) &amp; (h)

**TRANSMITTAL**

Fees are subject to annual revision)

Send completed form to: Commissioner for Patents  
P.O. Box 1450, Alexandria, VA 22313-1450

Application Number	10/654,996
Filing Date	September 5, 2003
First Named Inventor	Hiroki KANAI
Art Unit	2182
Examiner Name	Not yet assigned
Attorney Docket Number	500.43106X00

Enclosed is a petition filed under 37 CFR 1.102(d) that requires a processing fee (37 CFR 1.17(f), (g), or (h)). Payment of \$ 130.00 is enclosed.

This form should be included with the above-mentioned petition and faxed or mailed to the Office using the appropriate Mail Stop (e.g., Mail Stop Petition), if applicable. For transmittal of processing fees under 37 CFR 1.17(i), see form PTO/SB/17i.

**Payment of Fees** (small entity amounts are NOT available for the petition (fees))

☒ The Commissioner is hereby authorized to charge the following fees to Deposit Account No. 50-1417:

☐ petition fee under 37 CFR 1.17(f), (g) or (h)

☒ any deficiency of fees and credit of any overpayments

Enclose a duplicative copy of this form for fee processing.

☐ Check in the amount of \$ \_\_\_\_\_ is enclosed.

☒ Payment by credit card (From PTO-2038 or equivalent enclosed). Do not provide credit card information on this form.

**Petition Fees under 37 CFR 1.17(f):****Fee \$400****Fee Code 1462**

For petitions filed under:

§ 1.53(e) - to accord a filing date.

§ 1.57(a) - to accord a filing date.

§ 1.182 - for decision on a question not specifically provided for.

§ 1.183 - to suspend the rules.

§ 1.378(e) for reconsideration of decision on petition refusing to accept delayed payment of maintenance fee in an expired patent.

§ 1.741(b) - to accord a filing date to an application under § 1.740 for extension of a patent term.

**Petition Fees under 37 CFR 1.17(g):****Fee \$200****Fee code 1463**

For petitions filed under:

§ 1.12 - for access to an assignment record.

§ 1.14 - for access to an application.

§ 1.47 - for filing by other than all the inventors or a person not the inventor.

§ 1.59 - for expungement of information.

§ 1.103(a) - to suspend action in an application.

§ 1.136(b) - for review of a request for extension of time when the provisions of section 1.136(a) are not available.

§ 1.295 - for review of refusal to publish a statutory invention registration.

§ 1.296 - to withdraw a request for publication of a statutory invention registration filed on or after the date the notice of intent to publish issued.

§ 1.377 - for review of decision refusing to accept and record payment of a maintenance fee filed prior to expiration of a patent.

§ 1.550(c) - for patent owner requests for extension of time in ex parte reexamination proceedings.§ 1.956 - for patent owner requests for extension of time in inter partes reexamination proceedings.

§ 5.12 - for expedited handling of a foreign filing license.

§ 5.15 - for changing the scope of a license.

§ 5.25 - for retroactive license.

**Petition Fees under 37 CFR 1.17(h):****Fee \$130****Fee Code 1464**

For petitions filed under:

§ 1.19(g) - to request documents in a form other than that provided in this part.

§ 1.84 - for accepting color drawings or photographs.

§ 1.91 - for entry of a model or exhibit.

§ 1.102(d) - to make an application special.

§ 1.138(c) - to expressly abandon an application to avoid publication.

§ 1.313 - to withdraw an application from issue.

§ 1.314 - to defer issuance of a patent.

Name (Print/Type)

Frederick D. Bailey

Registration No. (Attorney/Agent)

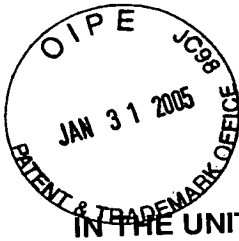
42,282

Signature

Date

January 31, 2005

This collection of information is required by 37 CFR 1.114. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.



500.43106X00

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicants: Hiroki KANAI

Serial No.: 10/654,996

Filed: September 5, 2003

For: STORAGE DEVICE CONTROL APPARATUS AND CONTROL METHOD  
FOR THE STORAGE DEVICE CONTROL APPARATUS

**PETITION TO MAKE SPECIAL  
UNDER 37 CFR 1.102(d) and MPEP. §708.02, VIII**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

January 31, 2005

Sir:

**1. Petition**

Applicants hereby petition to make this application **Special**, in accordance with 37 CFR §1.102(d) and MPEP 708.02, VIII. The present invention is a new application filed in the United States Patent and Trademark Office on September 5, 2003 and as such has not received any examination by the Examiner.

**2. Claims**

Applicants hereby represent that all the claims in the present application are directed to a single invention. If upon examination it is determined that all the claims presented are not directed to a single invention, Applicants will make an election without traverse as a prerequisite to the granting of special status.

### 3. Search

Applicants hereby submit that a pre-examination search has been made by a professional searcher, (a copy of which is attached), in the following classes and subclasses:

<u>Class</u>	<u>Subclass</u>
707	10
711	112, 114, 115, 151, 154

### 4. Copy of References

A listing of all references found by the professional searcher is provided on a Form PTO-1449 and copies of the references and the Form PTO-1449 are submitted as part of an Information Disclosure Statement (IDS) filed on even date.

### 5. Detailed Discussion of the References and Distinctions Between the References and the Claims

Below is a discussion of the references uncovered by the search and cited in the IDS filed on even date that appear to be most closely related to the subject matter encompassed by the claims of the present application, and which discussion particularly points out how Applicants' claimed subject matter is distinguishable over those references. All other references uncovered by the search and cited in the IDS filed on even date are **not** treated in detail herein.

**a. Detailed Discussion of the References**

**U.S. Patent No. 6,651,154 (Burton et al.)**, assigned to International Business Machines Corporation, is entitled Method, System, and Program for Expanding the Storage Space in an Array of Storage Units. Disclosed is a method, system and program for expanding storage space in an array of storage units. Storage units are added to the array to form an expanded storage space. At least one additional logical unit is configured in the expanded storage space such that the logical units existing prior to the addition of the storage units in the pre-expansion storage space are not affected by the logical units configured in the expanded storage space (see, column 1 lines 66-67 and column 2 lines 2-8).

**U.S. Patent No. 6,763,398 (Brant et al.)**, assigned to International Business Machines Corporation, is entitled Modular Raid Controller. Disclosed is an apparatus and method for customizing and deploying a modular RAID controller, wherein the functionality and components of a RAID controller are partitioned into a controller core card and a controller interface card. The controller interface card is designed to match the physical constraints and form factor of a particular product or manufacturer. The controller core card may be a daughter card that mates with the controller interface card via a storage connector and a host connector. The controller core card 410 may be mounted upon the controller interface card 420 (see, figure 4, column 2, lines 18-22, 26-29 and 46-49).

**U.S. Patent Publication No. 2001/0047462 A1 (Dimitroff et al.)** is entitled Cascaded Removable Media Data Storage System. Disclosed is a removable media

data storage system S with libraries in a cascade. By connecting the removable media data storage system controller of one or more removable media data storage units together into a cascade, the entire cascaded data storage system provides the supported computer network with increased data storage capacity, etc. The first level five channel-removable media data storage system controller is linked directly to the host or server computer network and then configured for either a mirrored array or RAID data transfer to a secondary data storage (see, paragraphs 29 and 30).

**U.S. Patent Publication No. 2003/0224824 A1 (Hanson)** is entitled Radio Configuration and Control of Computer Subsystems. Disclosed is a cabinet based modular electronic system comprising removably installing at least two modules in the cabinet and designating one module as a master module, establishing a communication link between the master module and at least one other module in the cabinet, and transferring information from at least one other module to the master module. Further a software program operating on a controller module that allows controller module to communicate with at least one other module may be provided (see, paragraph 7 and 8).

**b. Distinctions Between the References and the Claims**

The present invention as recited in the claims filed are not taught or suggested by any of the above noted references whether taken individually or in combination with each other or in combination with any of the other references now of record.

The present invention as recited in the claims is directed to a storage device control apparatus that includes: a mounting part capable of removably mounting:

channel control units, each with a host interface controller formed therein for receiving data I/O requests, disk control units, each with a disk interface controller formed therein for performing I/O control of the data to storage volumes storing data in response to the data I/O requests, cache memory units, each with a memory formed therein for storing the data, and storage control units, each with the host interface controller, the disk interface controller, and the memory formed therein; and an internal connection part for connecting the channel control units, the disk control units, the cache memory units, and the storage control units in a communicable manner.

The above described features of the present invention, particularly a storage device control apparatus that includes a mounting part capable of removably mounting: channel control units, disk control units, cache memory units, and storage control units, are not taught or suggested by any of the references of record whether taken individually or in combination with each other.

**6. Fee (37 C.F.R. 1.17(i))**

The fee required by 37 C.F.R. § 1.17(i) is to be paid by:

☒ the Credit Card Payment Form (attached) for \$130.00.


☐ charging Account \_\_\_\_\_ the sum of \$130.00.

A duplicate of this petition is attached.

Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, or credit any overpayment of fees, to the deposit account of Mattingly, Stanger & Malur, P.C., Deposit Account No. 50-1417 (500.43106X00).

Respectfully submitted,

MATTINGLY, STANGER & MALUR, P.C.



Frederick D. Bailey  
Registration No. 42,282

FDB/sdb  
Enclosures